

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

REC'D 02 AUG 2005

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(PCT Article 36 and Rule 70)

|  |  |   |  |                      |
|--|--|---|--|----------------------|
| Applicant's or agent's file reference<br>P33763-P0   |  | <b>FOR FURTHER ACTION</b>   |  | See Form PCT/PEA/416 |
| International application No.<br>PCT/JP2004/009479   |  | International filing date (day/month/year)<br>28.06.2004              | Priority date (day/month/year)<br>30.06.2003 |                      |
| International Patent Classification (IPC) or national classification and IPC<br>G11B20/12, G11B27/32, G11B20/00  |  |   |  |                      |
| Applicant<br>MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.  |  |   |  |                      |
| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 13 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> |  |   |  |                      |
| <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input checked="" type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input checked="" type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>   |  |   |  |                      |
| Date of submission of the demand<br><br>28.04.2005   |  | Date of completion of this report<br><br>01.08.2005                   |  |                      |
| Name and mailing address of the international preliminary examining authority:<br> European Patent Office<br>D-80298 Munich<br>Tel. +49 89 2399 - 0 Tx: 523656 epmu d<br>Fax: +49 89 2399 - 4465  |  | Authorized Officer<br><br>Sucher, R<br><br>Telephone No. +49 89 2399- |  |                      |

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**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/JP2004/009479

**Box No. I Basis of the report**

REC'D 02 AUG 2005

1. With regard to the **language**, this report is based on the international application **in the language in which it was filed**, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

**Description, Pages**

1-66 as originally filed

**Claims, Numbers**

1-39 as originally filed

**Drawings, Sheets**

1/26-26/26 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/JP2004/009479

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**Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

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1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:
- ☐ the entire international application,
  - ☒ claims Nos. 3,19,28-39  
because:
    - ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):
    - ☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 3,19,27 are so unclear that no meaningful opinion could be formed (*specify*):  
**see separate sheet**
    - ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
    - ☐ no international search report has been established for the said claims Nos.
    - ☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
      - the written form ☐ has not been furnished
      - ☐ does not comply with the standard
      - the computer readable form ☐ has not been furnished
      - ☐ does not comply with the standard
    - ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.
  - ☐ See separate sheet for further details

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/JP2004/009479

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**Box No. IV Lack of unity of invention**

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1. ☒ In response to the invitation to restrict or pay additional fees, the applicant has:
- ☐ restricted the claims.
  - ☒ paid additional fees.
  - ☐ paid additional fees under protest.
  - ☐ neither restricted nor paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with.
  - ☒ not complied with for the following reasons:  
**see separate sheet**
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☒ all parts.
  - ☐ the parts relating to claims Nos. .

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

|                               |             |                                     |
|-------------------------------|-------------|-------------------------------------|
| Novelty (N)                   | Yes: Claims | 6,9-11,15-17,20,22-24               |
|                               | No: Claims  | 1-2,4,5,7,8,12,13,14,18,21,25,26,27 |
| Inventive step (IS)           | Yes: Claims |                                     |
|                               | No: Claims  | 1-2,4-18,20-27                      |
| Industrial applicability (IA) | Yes: Claims | 1-2,4-18,20-27                      |
|                               | No: Claims  |                                     |

2. Citations and explanations (Rule 70.7):

**see separate sheet**

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

**see separate sheet**

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No. :  
PCT/JP2004/009479

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**Box No. VIII    Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**Re Item III**

**Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

Since the independent claim 27 is not clear (see section V below), no meaningful opinion with regard to novelty, inventive step and industrial applicability of dependent claims 28-39 could be formed.

**Re Item IV**

**Lack of unity of invention**

1. Reference is made to the following documents:

- D1: US 2002/172117 A1 (FURUKAWA SHUNSUKE ET AL) 21 November 2002;
- D2: EP-A-0 817 195 (SONY CORP) 7 January 1998;
- D3: PATENT ABSTRACTS OF JAPAN vol. 2000, no. 01, 31 January 2000 & JP 11 288555 A (VICTOR CO OF JAPAN LTD), 19 October 1999;
- D4: WO 02/37494 A (SONY CORPORATION; SAKO, YOICHIRO; INOKUCHI, TATSUYA) 10 May 2002 & EP-A-1 333 438;
- D5: EP-A-1 152 412 (SONY CORPORATION) 7 November 2001;
- D6: GB-A-2 344 925 (MEMORY CORP PLC; MEMORY CORP TECH LTD (GB)) 21 June 2000;
- D7: PATENT ABSTRACTS OF JAPAN vol. 2000, no. 26, 1 July 2002 & JP 2001 243704 A (AIWA CO LTD), 7 September 2001;
- D8: EP-A-0 777 227 (SONY CORP) 4 June 1997;
- D9: US-B1-6 343 281 (KATO TAKEHISA) 29 January 2002.

2. Claim 1 defines an information recording medium comprising a first and a second recording area, each for recording information and management information, wherein the second information is "generated based on the first information". This covers any recording medium on which the same content is recorded at least twice, each time in a different recording format. Such a recording medium is widely known in the art (Article 33(2) PCT), as can readily be seen from the passages of documents D1 to

D8 cited in the Search Report.

The special technical features, representing the contribution over the prior art, of dependent claims 2, 4, 8, 12, 13, 18, 21 and 25 and independent claim 27 are as follows:

claim 2:

link information which indicates that the first information and the second information are related to each other;

claim 4:

first copyright information and independent second copyright information;

claim 8:

the first and the second information is encrypted by a first and a second encryption system, respectively;

claim 12:

the first and the second information is compressed and non-compressed information, respectively;

claim 13:

a plurality of pieces of second information different from each other in attribute;

claim 18:

third management information;

claim 21:

synchronous reproduction information and synchronous reproduction management information;

claim 25:

audio, moving picture, still picture and text information;



claim 27:

reproducing the first and the second information based on the decryption of the first and the second management information, respectively.

Neither these nor any corresponding technical features are present in another of said claims, so that the technical relationship among the subject-matter of said claims required by Rule 13.2 PCT is lacking, and the requirement for unity of invention referred to in Rule 13.1 PCT is not fulfilled.

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Document D1 also discloses that the TOC information includes identifier information indicating that the recording medium records the same audio data in two kinds of recording formats (see in particular par. 0056-0058) which corresponds to link information indicating that the first information and the second information are related to each other, as it is defined in claim 2. The subject-matter of claim 2 does therefore not meet the requirements of Article 33(2) PCT.

The same objection also applies with regard to document D2 (see e.g. claim 1) and D5 (see par. 0039 and fig.4, part no. of the same contents 204).

Claim 3 further specifies that the link information includes an identification number, and defines that the first management information includes a "group number" and a "track number". Track numbers are well-known to be included in TOC information of a conventional CD, as e.g. defined in D1, D2 and D5, such that the only distinguishing feature of the claim to the prior art is the "group number", the meaning of which is however not clear because no "groups of information" are defined (Article 6 PCT). Thus, no opinion with regard to inventive step can be established.

2. Claim 4 defines that the first recording area further includes first copyright management information regarding copyright of the first information and the second



recording area further includes independent second copyright information regarding copyright of the second information. This feature is known from document D3 (see the abstract, first and second CGMCAPS) and document D4 (see par. 0057-0061 and fig. 7, copyright management information R1 and R2).

Claims 5 and 7 further specify that the second copyright management information includes copy management information indicating a copy condition for the second information, which may include "at least one of: whether copying is permitted, ...". This kind of copy management information is however disclosed by the copy generation management system (CGMS) of D3 and the serial copy management system (SCMS) of D4 (see in particular par. 0003), see also document D9 (copy management flag CF).

The subject-matter of claims 4, 5 and 7 does therefore not meet the requirements of Article 33(2) PCT.

Claim 6 further specifies that the second copyright information includes transaction information which indicates whether or not copyright information, which is different from the second copyright information is applicable to the second information. However, this merely corresponds to information indicating whether a copyright is present at all to the second information, which is well known for such a recording medium (see e.g. document D5, claim 64, and par. 0046 in conjunction with fig. 5, flag FLG1). Thus, the subject-matter of claim 6 does not involve an inventive step in the sense of Article 33(3) PCT.

3. Document D5 also discloses to encrypt the first information by a first encryption system and the second information by a second encryption system (see claims 74-77), as defined in claim 8. The subject-matter of claim 8 does therefore not meet the requirements of Article 33(2) PCT.

Although D5 is silent about details of the two types of encryption, it is obvious that they can be the same and that the same key can be used for the encryption, as defined in claims 9-11. Thus, the subject-matter of claims 9-11 does not involve an inventive step in the sense of Article 33(3) PCT.

4. Claim 12 defines that the first information is non-compressed information and the second information is obtained by "irreversibly compressing" the first information, which is not clear (Article 6 PCT) and can only be understood as "lossy compressing". Such a recording medium is however readily known from documents D5 (see par. 0056 and claims 41-46) and D6 (see figs. 6 and 7, session 1 containing CD audio tracks, session 2 containing an MP3 compressed version of the audio tracks). The subject-matter of claim 12 is therefore not new in the sense of Article 33(2) PCT.
5. Claim 13 defines that a plurality of pieces of second information are generated based on the first information and the generated plurality of pieces of second information are different from each other in attribute. Document D7 discloses a recording medium (hard disk) in which three forms of files related to the same voice data coexist (WAVE encoded file Fwav, MP3 compressed file Fmp3 and encrypted MP3 file SC-Fmp3), which also anticipates claim 14 according to which the first and second information are audio information and the attribute indicates "at least one of" recording system, compression ratio, etc. The subject-matter of claims 13 and 14 does therefore not meet the requirements of Article 33(2) PCT.

The features added by claims 15-17 have already been employed in a similar recording medium in documents D3 to D5, as has already been shown with regard to claims 4-11 in par. 2 and 3 above. The skilled person would therefore regard it a normal design procedure to combine all the features set out in claims 13 and 15-17. Thus, the subject-matter of claims 15-17 does not involve an inventive step in the sense of Article 33(3) PCT.

6. Claim 18 comprises all the features of claim 2 and is therefore not appropriately formulated as a claim dependent on the latter (Rule 6.4 PCT).

The feature added by claim 18 (third management information regarding handling of the second information which does not include the first link information) cannot be used to distinguish the subject-matter of the claim from the disclosure of documents D1, D2 and D5 (see par. 1 above) because any part of the second management information, which also relates to the handling of the second information, except the

first link information falls under this definition (Article 33(2) PCT). This further renders claim 19 unclear (Article 6 PCT) because the second management information and a part of the second management information except the first link information (corresponding to the third management information) are always related to each other.

The features added by claim 20 have already been employed in a similar recording medium in document D4, see in particular par. 0061 and fig. 7D, copyright management information R1a/R1b ("first copyright management information"), copyright management information R2a ("second copyright management information"), copyright management information R2b ("third copyright management information"). In view of par. 2 and 5 above, the subject-matter of claim 20 therefore also lacks an inventive step (Article 33(3) PCT).

7. Claim 21 defines that the second recording area further includes synchronous reproduction information which is reproduced in synchronization with the second information and synchronous reproduction management information regarding handling of the synchronous reproduction information. This also applies to the data in one recording area with is to be reproduced in synchronization with the data in another recording area in accordance with recorded time codes, as disclosed in document D8, see in particular col. 29, l. 48 - col. 30, l. 39 in conjunction with fig. 11, and col. 44, l. 36 - col. 50, l. 33. The subject-matter of claim 21 is therefore not novel in the sense of Article 33(2) PCT.

In view of par. 1 to 6 above, the subject-matter of claims 22-24 does not meet the requirements of Article 33(3) PCT.

8. The features added by claims 25 and 26 (the first, second and synchronous reproduction information each include "at least one of audio information, moving picture information, ...") are also readily known from documents D1 to D8. Thus, the subject-matter of claims 25 and 26 is not novel either (Article 33(2) PCT).
9. Claim 27 defines a reproduction apparatus for reproducing at least one of the first information and the second information of the information recording medium

according to claim 1, comprising a first storage section having stored therein "at least one of first decryption information ... and second decryption information", wherein "when the first storage section stores the first decryption information and the first information is to be reproduced" a first reproduction method is performed and "when the first storage section stores the second decryption information and the second information is to be reproduced" a second reproduction method is performed.

However, the claim leaves it completely open under which condition the first or the second information is to be reproduced which renders the claim unclear for the case that both, the first and second decryption information are stored (Article 6 PCT). Further, for the case that only the first decryption information is stored, a different reproduction method is performed than for the case that only the second decryption information is stored, i.e. the claim attempts to define two different apparatuses at once which is not clear either. Without an appropriate clarification, the subject-matter of claim 27 is not new in the sense of Article 33(2) PCT, because document D9 readily shows (see the passages cited in the Search Report) a reproduction apparatus storing decryption information (master keys Mk1, Mk2, ...) which reads management information (encrypted copy flag EMki(CF)) from a recording medium, decrypts the management information based on the decryption information, and based on the decryption result of the management information (i.e. the copy flag which controls permission with regard to copying of the main data), reads and outputs the information (main data) stored on the recording medium.

### **Re Item VII**

#### **Certain defects in the international application**

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in documents D1 to D8 is not mentioned in the description, nor are these documents identified therein.
2. The independent claims are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art being placed in a preamble and with the remaining

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.

PCT/JP2004/009479

features being included in a characterising part.

3. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

**Re Item VIII**

**Certain observations on the international application**

see section V above.